

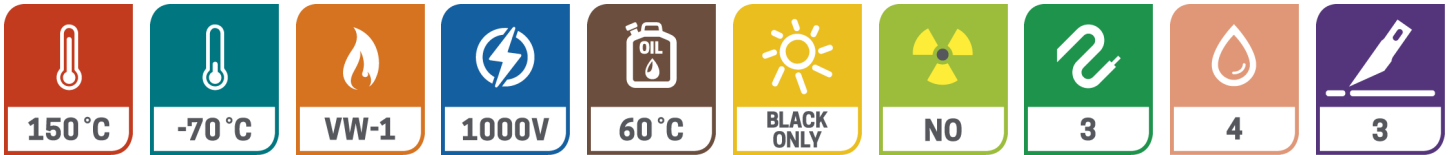


150 FX

High-Voltage ISO Battery Cable

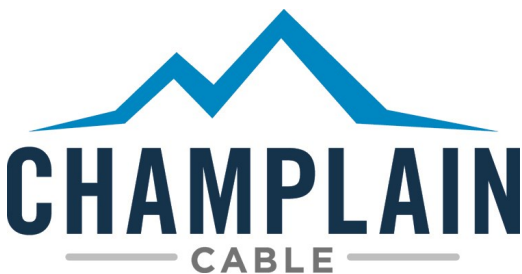
1000V, 150°C, ISO 6722-1, Class D, Thick Wall

- Highly Engineered EXRAD® 150FX Irradiation Crosslinked Polyolefin
- Meets or Exceeds ISO-6722-1 Requirements
- Flexible, Thin, Fluid Resistant and Tough
- Designed Specifically for Higher Currents and Voltages of HEV/EV's
- Performs at Higher Temperatures for Longer Periods of Time.
- Excellent Low-Temperature Performance



Product Number	Std. Conductors Bare Copper**	Nom. Conductor		Nom. Insulation		Nom. Finished		Min. Static		Finished Weight KG/KM	Conductor Resistance Ω per KM*
		Diameter		Thickness		Diameter		Bend Radius			
		mm.	in.	mm.	in.	mm.	in.	mm.	in.		
EXRAD-FXIH-6	6.0mm ² (84/.30)	2.92	.115	1.06	.042	4.80	.189	24	1.0	68	3.01
EXRAD-FXIH-10	10mm ² (80/.40)	3.99	.157	1.06	.042	6.20	.244	31	1.3	112	1.78
EXRAD-FXIH-12	12mm ² (154/.32)	4.88	.192	1.06	.042	7.00	.276	35	1.4	134	1.47
EXRAD-FXIH-16	16mm ² (105/.46)	5.21	.205	1.24	.049	8.00	.314	40	1.6	208	1.13
EXRAD-FXIH-20	20mm ² (247/.32)	6.17	.243	1.24	.049	8.60	.339	43	1.7	216	0.91
EXRAD-FXIH-25	25mm ² (798/.20)	6.85	.269	1.24	.049	9.90	.390	50	2.0	261	0.72
EXRAD-FXIH-35	35mm ² (551/.28)	8.12	.320	1.24	.049	10.60	.417	53	2.1	356	0.52
EXRAD-FXIH-40	40mm ² (494/.32)	8.89	.350	1.27	.050	11.80	.464	59	2.3	419	0.47
EXRAD-FXIH-50	50mm ² (798/.28)	9.91	.390	1.27	.050	12.50	.492	63	2.5	509	0.36
EXRAD-FXIH-70	70mm ² (1140/.28)	11.83	.466	1.40	.055	14.50	.571	87	3.4	711	0.26
EXRAD-FXIH-95	95mm ² (1938/.25)	13.20	.521	1.90	.075	17.00	.669	102	4.1	968	0.19
EXRAD-FXIH-120	120mm ² (2442/.25)	15.24	.600	1.90	.075	19.04	.750	112	4.5	1211	0.15

** Other conductor stranding options and Tinned Copper conductors are available. Contact Factory for Details





150 FX

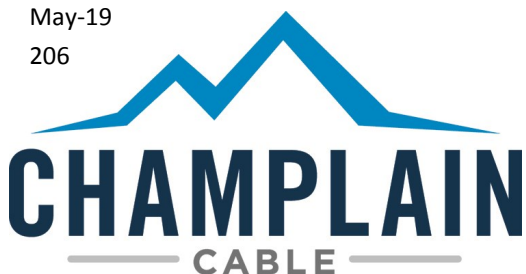
High-Voltage

ISO Battery Cable

Section	Description	Requirement	Typical Results (70mm ² Sample)	
5.1	Outside Cable Diameter	15.50 max.	14.47mm	Pass
5.2	Insulation Thickness	1.204mm min.	1.22mm	Pass
5.3	Conductor Diameter	12.50mm max.	12.09mm	Pass
5.4	Conductor Resistance	0.259 mΩ/m @20°C max.	0.242 mΩ/m	Pass
5.5	Withstand Voltage	1000V 5kV	no dielectric breakdown	Pass
5.6	Insulation Faults	Sparktest @ 12.5V	no faults	Pass
5.7	Insulation Volume Resistivity	10 ⁹ Ω/mm min.	3.103 X 10 ¹⁷ Ω /mm	Pass
5.8	Pressure at High Temperature	'under load @150°C no dielectric breakdown	No breakdown	Pass
5.9	Strip Force / Adhesion	Per customer agreement	NA	NA
5.10	Low Temperature Winding	3 tns 30kgm - 40°C no breakdown	no dielectric breakdown,	Pass
5.11	Impact	400gm @-40°C no breakdown	no breakdown,	Pass
5.12.4.1	Sandpaper Abrasion	NA	NA	Pass
5.12.4.2	Scrape Abrasion	NA	NA	Pass
5.13	Long-Term Heat Aging	150°C 3000 hours	no breakdown, no cracks	Pass
5.15	Thermal Overload	200°C 6 hours	no breakdown, no cracks	Pass
5.16	Shrinkage by heat	2mm max. 150°C	no shrinkage,	Pass
5.17	Fluid Compatibility	Gasoline 15% max.	7.5%	Pass
		Diesel Fuel 15% max.	2.7%	Pass
		Engine Oil 15% max.	3.2%	Pass
		Ethanol 15% max.	4.7%	Pass
		Power Steering 30% max	4.1%	Pass
		Automatic Transmission 25% max	3.2%	Pass
		Engine Coolant 15% max	0.4%	Pass
		Battery Acid no breakdown	no breakdown,	Pass
5.19	Ozone Resistance	45°C 85% Relative Humidity, 70 hours, Ozone 50 +/- 5 pphm 1kV 1 min. (no break-	no breakdown,	Pass
5.20	Resistance to hot water	not less than 10-9 Ohm-mm	1.82 X 10 ⁻¹⁶ Ohm-mm	Pass
5.21	Temperature and Humidity Cycling	40 - 8 hours cycles -40°C and 125°C 80 - 100% relative humidity	no dielectric breakdown, no cracking	Pass
5.22	Resistance to Flame	70 sec. max. 50mm unburned	0 - 1 sec. after burn	Pass

We cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product combination for their own purpose. Unless otherwise agreed in writing, we sell the products without warranty, and buyers and users assume all responsibility and liability for loss and damage arising from the handling and use of our products whether used alone or in combination with other products

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Manufacturing Locations:
Colchester, Vermont
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